



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, MID-ATLANTIC
9324 VIRGINIA AVENUE NORFOLK, VA 23511-3085

5090
OPTE3/18/LF
May 21, 2015

Henry Wilkie
New York State Department of Environmental Conservation
Division of Environmental Remediation
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Albany, New York 12233-7015

Steven Karpinski
New York State Department of Health
Empire State Plaza
Corning Tower Room 1787
Albany, New York 12237

Dear Mr. Wilkie and Mr. Karpinski,

Subj: EXCESS WATER AT BETHPAGE WATER DISTRICT PLANT 6; NAVAL WEAPONS
INDUSTRIAL RESERVE PLANT (NWIRP) BETHPAGE (130003B), OPERABLE
UNIT (OU)-2

The Department of the Navy (DON) is working with Bethpage Water District (BWD) to conduct a pilot study using BWD Well 6-2 (N-8942). The purpose of the study is to determine the effectiveness and feasibility of using this well to provide substantial or total capture of the volatile organic compounds (VOCs) hot-spot in the area of the plant. This hot spot is being referred to as the RE108 Hot Spot, and is named based on monitoring wells located approximately 2,300 feet northwest of BWD Well 6-2 that contains up to 4,600 micrograms per liter (µg/L) of trichloroethene (TCE). The depth of the contamination in the RE108 Hot Spot (640 to 740 feet below ground surface [bgs]) is consistent with the screen interval of BWD Well 6-2 (700-770 bgs) and its anticipated capture zone. Also, the hydrogeologic connection between the BWD Plant 6 well and the RE108 Hot Spot is further indicated by the sustained VOC concentrations in BWD Well 6-2 of approximately 1,000 to 1,400 µg/L when it has been operating for a period of time. When BWD Well 6-2 has not operated for several weeks, the VOC concentrations in this well decrease 200-fold, indicating that the Well 6-2 is not normally within the RE108 Hot Spot, but rather intercepts the hot spot with its wide capture zone during extended operation.

In 2013, a short-term (24 hour) capture zone test and analysis performed by the Navy indicated that continuous operation of Well 6-2 could effectively capture a majority of the area currently estimated to represent the RE108 Hot Spot. However, longer term testing of approximately three (3) to six (6) months is required to refine the capture zone estimates and determine whether other issues may develop,

approximately three (3) to six (6) months is required to refine the capture zone estimates and determine whether other issues may develop, such as the impact of discharging up to 2 million gallons per day of treated water to a recharge basin. Since Well 6-2 may be taken off line in the next year in order to upgrade treatment plant, the pilot test is currently scheduled to start as soon as possible this summer and continue into the fall and potentially winter of this year. In order to meet BWD's customer demands, BWD will continue to operate Well 6-2 with the water being treated using the current treatment system, and then distributed to their customers. The excess water, above BWD's customer's demands, will be discharged to a local recharge basin located within the BWD distribution network. BWD has indicated that the basin near the Navy's GM-38 Treatment System receives blow down from BWD Plant 6. The Navy will confirm the appropriate discharge location and capacity of the basin during the pilot study. The Navy and BWD are current working on a contract to conduct the pilot test pursuant to which the Navy would reimburse BWD for the cost of pumping, treating, and discharging the excess water during the pilot test.

NG, as a potentially responsible party under CERCLA and former owner and operator of both the NWIRP and NG properties, is obligated not only to share the financial responsibility but to actively participate in response action implementation including, but not limited to, the response to the RE-108 hot spot. In fact, as part of the recently signed Order on Consent with NYSDEC, Northrop Grumman (NG) specifically agreed to work cooperatively with the Navy in the development of the plan to address the RE-108 hot spot. While the Navy will continue its efforts to get the pilot study under way as soon as possible, it will also reach out to NG in an effort to develop a plan to address the RE-108 hot spot cooperatively.

If you have any questions, please contact the Navy's remedial project manager, Lora Fly, at (757) 341-2012.

Sincerely,



NINA M. JOHNSON
Northeast IPT
Environmental Business Line
Team Leader
By direction of the
Commanding Officer

Copy to:

NAVAIR, William Cords - e-mail

NYSDEC, Steve Scharf- e-mail

USEPA Region II, Carol Stein- e-mail

BWD, Mike Boufis- e-mail

Northrop Grumman, Ed Hannon- e-mail

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